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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,990	05/31/2001	Owen P. Ward	2570LI-1	3149
23716	7590	12/09/2003	EXAMINER	
ANTHONY ASQUITH 28-461 COLUMBIA STREET WEST WATERLOO, ON N2T 2P5 CANADA			HRUSKOCI, PETER A	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 12/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/872,990	WARD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Peter A. Hruskoci	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 6-11,6-16, and 9-18-03.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5,8-23,29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) 20-23,29 and 30 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5 and 8-19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____                                     |

Art Unit: 1724

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 8-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christy et al. 5,013,458 in view of Burnham 5,275,733 and Christy et al. 5,851,404. Christy et al. disclose (see col. 3 line 13 through col. 5 line 68) a method for treating sewage sludge substantially as claimed. The claims differ from Christy et al. (458) by reciting that the sludge is maintained at the pH for at least one day or chemicals are added to contribute to viscosity reduction, and the sludge is subjected to physical shearing or disintegration. Burnham disclose (see col. 4 lines 1-33, and Example 1) that it is known in the art to maintain the pH of the sludge at least 12 and add sodium and potassium chloride to the sludge to reduce pathogens and alter the conductivity of the sludge, respectively. Christy et al. (404) disclose (see col. 3 line 30 through col. 6 line 38) that it is known in the art to subject sludge to shearing to aid in reducing the viscosity of the sludge. It would have been obvious to one skilled in the art to modify the method of Christy et al. (458) by maintaining the pH, adding the recited chemicals, and subjecting the sludge to shearing in view of the teachings of Burnham and Christy et al. (404) respectively, to aid in reducing pathogens, altering the conductivity, and reducing the viscosity of the sludge. The specific sequence of steps utilized and the use of a continuous procedure, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific sludge treated and results desired, absent a sufficient showing of unexpected results. With regard to claims 9 and 10, it is submitted that the addition of air in Christy et al. (404) would provide oxygen for the oxidation of the sludge.

Claims 20-23, 29, and 30 are withdrawn from consideration as being drawn to non-elected inventions. It is noted that the method claims were elected in the paper submitted 10-24-02.

Applicants allege that by combining the step of shearing the sludge with the steps of raising the pH and temperature, the instant method produces beneficial effects that are much greater than would be expected by merely aggregating the separate effects of the two steps. It appears that the teachings of Christy et al. (404) show that shearing of sludge changes the viscosity of the sludge and allows the sludge to flow more readily. It is further noted that the sludge sheared in Christy (404) includes alkaline material to raise the pH to 12 or higher, and has been heated to at least 50 C. Furthermore, applicants have not supplied sufficient factual evidence to support the above allegation.

This action is not final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is 703-308-3839. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 703-308-1261. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Peter A. Hruskoci  
Primary Examiner  
Art Unit 1724